

The Law Is Not as Blind as It Seems: Relative Rates of Vicarious Trauma among Lawyers and Mental Health Professionals

Grace Maguire and Mitchell K. Byrne

School of Psychology, University of Wollongong, Wollongong, NSW, Australia

Professionals who are exposed to trauma through work may indirectly experience distress and traumatisation of their own, often referred to as vicarious traumatisation (VT). Little research has been directed toward the experience of VT among lawyers, especially in terms of how it compares with the VT experienced by mental health professionals (MHPs). This study compares the extent to which exposure to traumatic information affects professionals of different disciplinary backgrounds. Additionally, personality traits that might theoretically influence an individual's vulnerability or resilience to VT are evaluated. Self-report measures were used to investigate symptoms of VT and personality traits in 36 lawyers and 30 MHPs. The results indicate that lawyers and individuals low on the Emotional Stability domain are significantly more susceptible to experiencing symptoms of VT. Exposure to trauma may be better managed by professionals in the mental health field, who have the advantage of having received trauma-specific training and access to informed peer support.

Key words: lawyers; mental health; personality; training; vicarious trauma.

Introduction

Professionals in contact with individuals exposed to traumatic experiences, and perpetrators of trauma, are at risk of being emotionally effected by this exposure (Cohen & Collens, 2013). An event is considered traumatic when it induces an overwhelming actual or perceived sense of threat to physical and psychological security (Murray & Royer, 2004). Hearing traumatic stories has been shown to promote emotional reactions in the listener (Byrne, Lerias, & Sullivan, 2006), with such reactions often exacerbated in professionals through exposure to additional sources of information on the nature of the traumatisation, such as re-enactments of the trauma, photographs, medical records and media accounts. In the scientific literature,

the reaction to others' accounts of traumatic events is commonly referred to as vicarious traumatisation (VT). VT reflects the painful psychological effects that result from engaging with traumatic material and integrating that material into one's cognitive schemas, disrupting beliefs about trust, safety, control, esteem and intimacy (McCann & Pearlman, 1990; Rothschild, 2006). Symptoms of VT resemble those of post-traumatic stress disorder (PTSD) and while symptoms may not meet all the criteria for a diagnosis of PTSD, they are nonetheless distressing and impairing for the individual (Lerias & Byrne, 2003).

Whilst all professionals vicariously exposed to trauma through work are thought to experience some degree of negative symptoms, not all develop VT (Neuman & Gamble, 1995; Way, VanDeusen, Martín,

Correspondence: Mitchell K. Byrne, School of Psychology, University of Wollongong, Wollongong, NSW, 2522, Australia. Phone: + 61 2 42215310. Email: mbyrne@uow.edu.au

Applegate, & Jandle, 2004). An individual's vulnerability or resilience to VT is expected to arise through an interaction of the personal characteristics of the individual and the characteristics of the work environment (Regehr, Hemsworth, Leslie, Howe, & Chau, 2004; Saakvitne & Pearlman, 1996). Work characteristics such as having a heavy caseload of traumatised clients (Schauben & Frazier, 1995), a lack of support within the work environment, or a lack of formal trauma training have been associated with higher levels of VT amongst professionals (Finklestein, Stein, Greene, Bronstein, & Solomon, 2015; Sprang, Craig, & Clark, 2011). Alternatively, it is suggested that professionals who report having good support systems, particularly with colleagues and supervisors, may be more resilient to VT due to the opportunity of addressing responses to their clients' trauma (Dunkley & Whelan, 2006; O'Halloran & O'Halloran, 2001; Pearlman & Saakvitne, 1995; Sabin-Farrell & Turpin, 2003).

The personality characteristics of the professional have also been shown to influence resilience or vulnerability to VT. Several studies have reported a relationship between high scores on the psychological dimension of Neuroticism and the development of negative trauma reactions and PTSD (Breslau & Schultz, 2013; Soler-Ferrería, Sánchez-Meca, López-Navarro, & Navarro-Mateu, 2014; van den Hout & Engelhard, 2004).

VT research to date has largely focused on the 'helping professions', inclusive of psychologists, counsellors and social workers. Most professional training programmes within these professions include strategies for self-care and management of emotional reactivity through the acceptance of ongoing professional support (Australian Association of Social Workers, 2013; O'Halloran & O'Halloran, 2001; Psychology Board of Australia, 2013). Such practices create awareness for the potential of distress in trauma work and are considered an essential factor in managing distressing responses to client trauma (Adam & Riggs, 2008; Saakvitne & Pearlman, 1996).

In the course of providing legal assistance to clients, lawyers are also frequently exposed to traumatic material. Such material can include information on the nature of rape, the abuse of children, murder, domestic violence and manslaughter (Murray & Royer, 2004). Despite evidence that legal practitioners are not only exposed to traumatic material but also react to this exposure (Vrklevski & Franklin, 2008), empirical research of VT among lawyers is lacking. Consequently, little is known as to whether practitioners of law experience greater or lesser degrees of VT in comparison to their helping-profession counterparts. High turnover rates of lawyers as well as research suggesting a vulnerability to mental health issues (Kang, Seligmanm, & Verkuil, 2005; Parker, 2014) may signify a potential vulnerability for lawyers to experience VT reactions.

The experience of VT has been reported in a lawyer population. Vrklevski and Franklin (2008) explored VT in criminal defence lawyers in comparison to lawyers working with non-traumatised clients. The results support the existence of VT in criminal lawyers, as measured through high levels of subjective distress, negative cognitive beliefs in relation to safety and intimacy, avoidance, intrusions and hyperarousal. Additionally, the criminal law group had more symptoms of depression and anxiety than those in the control groups. A personal history of trauma was also found to be associated with greater reports of VT, supporting Pearlman and Mac Ian's (1995) initial findings.

The current study compares the extent to which exposure to traumatic information affects helping professionals and legal practitioners. It also explores whether one's personality type can influence the level of risk surrounding a trauma reaction. It was hypothesised that both groups (lawyers and MHPs) experience symptoms consistent with a description of VT, but that lawyers would have more symptoms of VT in comparison to MHPs. It was further hypothesised that the personality traits of professionals would

influence VT symptoms and that the professional groups would possess differences in personality traits.

Method

Participants

The participants consist of professionals in the fields of law, psychology and social work working with clients who have experienced or are perpetrators of trauma. A total of 78 individuals volunteered to participate in the study (62 females, 16 males), but 8 participants (6 lawyers, 2 social workers) failed to complete the survey in its entirety and were subsequently excluded from the study, with a further 4 individuals excluded for not meeting the study criteria of working with a traumatised population. Accordingly, a total of 66 participants are included in the study. Lawyers ($n = 36$) working in criminal and family law were recruited from legal aid offices and private legal centres across New South Wales. The mental health professionals ($n = 30$) consist of psychologists ($n = 21$) and social workers ($n = 9$) recruited through the Australian Psychological Association database and private institutions.

Background and Demographics Questionnaire

In order to obtain background and demographic information, all participants completed a series of questions specifically found to influence levels of VT in the research literature. The sample's demographic information is presented in Table 1.

Measures

The Vicarious Trauma Scale (VTS)

To measure the psychological and affective symptoms of VT, participants were administered the Vicarious Trauma Scale (VTS; Vrkleviski & Franklin, 2008), an eight-item measure with response options ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

Examples of items include 'It is hard to stay positive and optimistic given some of the things I encounter in my work' and 'I find it difficult to deal with the content of my work'. It is suggested that total scores can be grouped into three categories to represent low (8–28), moderate (29–42) and high (43–56) levels of VT symptoms (Aparicio, Michalopoulos & Unick, 2013). The scale has previously been used amongst lawyers (Vrkleviski & Franklin, 2008) and social workers (Aparicio et al., 2013) and demonstrates good reliability (Cronbach's $\alpha = .88$ and Cronbach's $\alpha = .77$ for the two studies, respectively). In the present study, the VTS also demonstrates good reliability (Cronbach's $\alpha = .84$).

The Impact of Events Scale – Revised (IES-R)

Post-traumatic stress symptoms of VT were assessed using the Impact of Events Scale – Revised (IES-R; Weiss & Marmar, 1997), a standardised self-report measure designed to parallel the Diagnostic and Statistical Manual of Mental Disorders - Fourth Edition (DSM-IV; American Psychiatric Association, 1994) criteria for PTSD through measuring symptoms of avoidance, intrusions and hyperarousal. The IES-R has 22 questions rated on a 5-point Likert-type scale, ranging from 0 (*not at all*) to 4 (*extremely*). Examples of the IES-R items include 'I had dreams about it' and 'My feelings were kind of numb'. The IES-R yields a total score ranging from 0 to 88. The IES-R has adequate psychometric properties with internal consistencies of .87 to .93 for intrusions, .84 to .86 for avoidance, and .79 to .90 for hyperarousal. In the present study, the IES-R shows overall good reliability (Cronbach's $\alpha = .95$). The IES-R instructions were modified in this study for the purpose of measuring VT rather than PTSD. Participants were instructed to consider the last time they worked with a traumatised client as opposed to the IES-R instructions of considering their own traumatic event.

Table 1. Participant demographic information.

Variable	Total (n = 66)	Lawyers (n = 36)	MHPs (n = 30)
<i>Gender</i>			
Male	13 (20%)	7 (19%)	6 (20%)
Female	53 (80%)	29 (81%)	24 (80%)
<i>Age</i>			
18–24	5 (7%)	2 (5%)	3 (10%)
25–34	21 (32%)	14 (39%)	7 (23%)
35–44	11 (17%)	6 (17%)	5 (17%)
45–54	15 (23%)	8 (22%)	7 (23%)
55 and over	14 (21%)	6 (17%)	8 (27%)
<i>Education level</i>			
Undergraduate	17 (26%)	13 (36%)	4 (13%)
Honours	9 (14%)	4 (11%)	5 (17%)
Postgraduate degree	36 (54%)	19 (53%)	17 (57%)
Ph.D.	4 (6%)	0 (0%)	4 (13%)
<i>Social support</i>			
Yes	56 (85%)	32 (89%)	24 (80%)
No	11 (15%)	4 (11%)	6 (20%)
<i>Years of experience in profession</i>			
0–5	22 (33%)	14 (39%)	8 (27%)
6–10	13 (20%)	5 (14%)	8 (27%)
11–20	15 (23%)	9 (25%)	6 (19%)
21–30	10 (15%)	5 (14%)	5 (17%)
30+	6 (9%)	3 (8%)	3 (10%)
<i>Trauma history</i>			
Yes	44 (67%)	23 (64%)	21 (70%)
No	22 (33%)	13 (36%)	9 (30%)
<i>Re-experiencing of traumatic event</i>			
Yes	27 (41%)	16 (44%)	11 (63%)
No	39 (59%)	20 (56%)	19 (37%)

Note: MHPs = mental health professionals.

The Depression, Anxiety and Stress Scale-21 (DASS-21)

The Depression, Anxiety and Stress Scale-21 (DASS-21; Lovibond & Lovibond, 1995) was included in the survey as a manipulation check with the intention of confirming if the VTS and IES-R were measuring distress related to working with traumatised individuals. It was expected that group scores on the VTS and IES-R would also reflect group scores on subscales of the DASS-21 due to the associated distress of VT (Moulden & Firestone, 2007). The DASS-21 is a 21-item standardised self-

report tool measuring depression, anxiety, and stress. Each scale contains 7 items rated on a Likert-type scale ranging from 0 (*did not apply to me at all*) to 4 (*applied to me very much or most of the time*). The DASS-21 has sound psychometric properties, with internal consistencies of .91 for depression, .80 for anxiety, and .84 for stress in a sample of non-clinical participants (Sinclair, Siefert, Slavin-Mulford, Stein, Renna, & Blais, 2012), along with good test-retest reliability, and it has demonstrated good content, construct, and concurrent validity (Lovibond & Lovibond, 1995).

The Ten Item Personality Inventory (TIPI)

The personality traits of the participants were measured using the Ten Item Personality Inventory (TIPI; Gosling, Rentfrow, & Swann, 2003). The TIPI takes approximately one minute to complete with the use of two items to cover each of the five personality dimensions. Each item assesses personality traits through the use of two adjectives, e.g. 'critical, quarrelsome', rated on a scale ranging from 1 (*disagree strongly*) to 7 (*agree strongly*). Items are then summed, with five items being reverse scored so that higher scores on the measure represent higher levels of the personality trait. The TIPI has been found to have adequate convergent correlations with the Big Five inventory (Gosling et al., 2003). In the present study, the Cronbach's alpha scores range from .45 to .74, with the TIPI demonstrating reasonably adequate reliabilities for the overall scale (Cronbach's $\alpha = .65$). These results reflect the internal consistency reported by Gosling et al. (2003).

Procedure

Participants were recruited via email direct from the researcher or forwarded via colleagues. Emails were sent to professionals who fit the criteria of working with traumatised individuals, asking for volunteers to complete a survey via SurveyMonkey. Upon accessing the SurveyMonkey link, participants were presented with an online questionnaire containing the measures previously discussed.

Results

Characteristics of the Sample

The characteristics of the sample are presented in Table 1. The groups were compared on demographic variables using independent-samples *t*-tests. Across the sample there are no significant differences between groups observed in trauma history, $t(64) = -0.517$, $p = .607$, intrusive symptoms associated with past trauma, $t(64) = 0.632$, $p = .530$, age, t

$(64) = -0.863$, $p = .391$, or length of time in profession, $t(64) = -0.534$, $p = .595$. Group differences are observed on level of education, $t(64) = -2.364$, $p = .021$. A chi-square test for association demonstrated that there are no significant differences in gender, $\chi^2(1) = 0.003$, $p = .955$, or subjective rating of personal support, $\chi^2(1) = 1.01$, $p = .316$.

Vicarious Trauma across Groups

An independent-samples *t*-test was used to assess group differences in the total VTS scores. The VTS score is significantly higher for lawyers, $M = 39.86$, $SD = 7.81$, than for MHPs, $M = 33.13$, $SD = 6.96$, 95% CI (3.06 to 10.40), $t(64) = 3.66$, $p = .001$. This effect can be considered large ($d = .90$).

With respect to the IES-R, violations of normality required a Mann-Whitney *U*-test to assess differences between groups. Two extreme scores were detected and altered to one point above the next largest score. The IES-R scores for lawyers (*mean rank* = 40.00) are significantly higher than for MHPs (*mean rank* = 24.83), $U = 280.00$, $z = -3.235$, $p = .001$. This effect can be described as medium ($r = .40$).

Levels of Depression, Anxiety and Stress

Independent samples *t*-tests were used to compare levels of depression, anxiety and stress amongst professionals. Lawyers were significantly higher on all measures of the DASS-21 scales (Table 2).

Individual Items of the VTS

To further examine where groups differ in VT symptoms, independent-samples *t*-test analyses were carried out on individual items of the VTS. Items 1 and 2 were excluded from analysis as suggested by Aparicio et al. (2013), who reported that these items appear to be screening questions rather than measures of VT. A significance level of .008 was used due to multiple comparisons of means

Table 2. Comparison of lawyers and MHPs on the DASS-21

	Total (<i>n</i> = 66)		Lawyers (<i>n</i> = 36)		MHPs (<i>n</i> = 30)			
Instrument	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>p</i>	<i>d</i>
Measured by DASS-21								
Depression	10.42	4.14	11.88	4.49	8.67	2.86	.001***	0.84
Anxiety	9.80	3.79	11.42	4.39	7.87	1.33	.000***	1.01
Stress	13.05	4.42	14.58	4.80	11.28	3.18	.002**	0.80

Note: ***p* < .01 (two-tailed); ****p* < .001 (two-tailed). DASS-21 = Depression, Anxiety and Stress Scale-21; MHPs = mental health professionals.

within the same data set. The results of the *t*-test (Table 3) reveal that groups significantly differ on item 4 ('I find it difficult to deal with the content of my work'), item 6 ('Sometimes I feel helpless to assist my clients in the way I would like'), and item 8 ('It is hard to stay positive and optimistic given some of the things I encounter in my work').

Personality as a Predictor of VT

Bivariate correlations (Pearson's *r* and Spearman's Rho) were used to examine the relationship between the Big Five personality traits and VT reactions across the entire sample (Table 4). Emotional Stability is significantly negatively correlated with scores on the VTS (*p* = .000) and the IES-R (*p* = .041) suggesting that individuals who score low on Emotional Stability (i.e. who score high on Neuroticism) have higher levels of VT. Con-

scientiousness (*p* = .020) and Openness to Experience (*p* = .038) are significant only for the VTS, while high levels of Agreeableness (*p* = .000) are positively related to higher scores on the VTS.

Group Differences in Personality

Independent *t*-tests were run to determine if there are differences in personality between the lawyers and the MHPs. An adjusted alpha level of .01 was used for significance of statistical finding. There are no significant differences observed across the groups on any of the five personality traits measured.

Analysis of Individual Characteristics and VT

An analysis of the variables previously found to influence levels of VT is investigated in

Table 3. Descriptive statistics on individual items of the VTS.

VTS item	Lawyers (<i>n</i> = 36)		MHP (<i>n</i> = 30)		<i>p</i>	<i>t</i>	95% CI	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
3	4.64	1.51	3.80	1.47	.027	2.27	0.101, 1.580	.41
4	3.39	1.54	2.10	1.21	.000***	3.73	0.598, 1.980	.67
5	4.39	1.79	3.33	1.83	.021	2.36	0.163, 1.948	.43
6	4.92	1.61	3.57	1.43	.001***	3.57	0.594, 2.106	.64
7	5.17	1.56	4.33	2.01	.062	1.90	−0.043, 1.709	.39
8	4.61	1.71	2.83	1.58	.000***	4.35	0.962, 2.594	.79

Note: ****p* < .001 (two-tailed); CI = confidence interval; MHPs = mental health professionals; VTS = Vicarious Trauma Scale.

Table 4. Correlations between predictor variables and VT measures.

	<i>M</i>	<i>SD</i>	VTS <i>r</i>	IES-R <i>r_s</i>
Extraversion	8.98	3.21	−.119	−.185
Agreeableness	9.62	2.44	.508**	.087
Conscientiousness	11.33	2.25	−.285*	−.033
Emotional Stability	10.38	2.44	−.483**	−.255*
Openness to Experience	10.17	2.15	−.260*	−.730

Note: **p* < .05 (two-tailed); ***p* < .01 (two-tailed); *r* = Pearson's correlations; *r_s* = Spearman's correlations. IES-R = Impact of Events Scale – Revised; VTS = Vicarious Trauma Scale.

the present sample through point-biserial correlations on VT measures. The results suggest that individuals who report intrusive post-traumatic stress symptoms as a result of a past trauma experience more post-traumatic stress symptoms with VT ($r = .33, p = .03$). No other predictor variables are associated with significantly higher or lower levels of VT.

Predictor Variables

In order to assess the amount of variance that can be accounted for by variables found to be correlated with VT symptomology, a four-stage hierarchical multiple regression analysis (MRA) was conducted. Profession accounts for 15% of the variance, $F(1, 62) = 11.02, p = .002$, with a further 20% accounted for after entering Emotional Stability, $F(2, 61) = 16.40, p = .000$. Entering the remaining personality traits accounts for a further 18% of the variance, $F(6, 57) = 10.75, p = .001$, and finally including the trauma history contributes a further 6% to the solution, $F(8, 55) = 9.99, p = .022$. Similarly, a hierarchical regression was conducted for the prediction of the IES-R. The results indicate that only profession (14%), $F(1, 61) = 11.36, p = .001$, and trauma history (10%), $F(8, 54) = 3.50, p = .023$, are significant predictors of IES-R results.

Discussion

The overall results support the existence of symptoms of VT in professionals exposed to trauma through work (Saakvitne & Pearlman, 1996). Both the lawyers and the MHPs scored in the 'moderate' range (26–43) for affective and cognitive symptoms on the VTS. Regarding PTS symptoms, the lawyers scored in the mild range (9–25) while the MHPs scored in the subclinical range (0–8). The hypothesis that lawyers would experience higher levels of symptomatology indicative of VT in comparison to MHPs is also supported. These findings offer further support to Vrkleviski

and Franklin's (2008) research that criminal lawyers are a professional group at risk of suffering from VT.

Supporting group differences in VT, the lawyers also report more symptoms of depression, anxiety and stress in comparison to the MHPs. However, it is not clear whether VT influences symptoms of depression, anxiety and stress or whether such psychopathology increases vulnerability for VT. The relationship between these two concepts should be clarified in future research.

Significant differences between professionals are also observed on selected items of the VTS. The effect sizes for these differences are large and offer further insight into how the groups differ on symptoms of VT. Item 4 on this scale ('I find it difficult to deal with the content of my work') reflects lawyers' profound exposure to trauma. The lawyers also exhibit significantly higher scores on item 6 ('Sometimes I feel helpless to assist my clients in the way I would like') and item 8 ('It is hard to stay positive and optimistic given some of the things I encounter in my work'), relating to the affective impact of working with traumatised clients (Aparicio et al., 2013).

In contrast to the literature, which suggests that an individual's length of time in profession (Horowitz, 2006; Steed & Bicknell, 2001), gender (Horowitz, 2006) and age (Deville, Wright, & Varker, 2009) may influence levels of VT, such relationships in the present study were found to be insignificant. Interestingly, trauma history is not related to increases in symptoms of VT according to the correlational analysis, contradicting the findings of Vrkleviski and Franklin (2008). However, trauma history uniquely contributes to scores on the VTS in regression analysis. Based on these results and the inconsistency in the literature (Sabin-Farrell & Turpin, 2003), it is plausible to suggest that while trauma history may slightly influence an individual's vulnerability to VT, it does not appear to be as strong a predictor of VT as suggested by Saakvitne and Pearlman (1996).

Investigations into the relationship between the Big Five personality factors and VT suggest that individuals who score low on Emotional Stability, indicative of high Neuroticism (Maltby, Day, & Macaskill, 2010), are more susceptible to experiencing symptoms of VT. Furthermore, Conscientiousness correlates with lower affective symptoms and negative beliefs, though no significant results were found for post-traumatic stress symptoms. These results support previous research by Măirean and Turliuc (2013), who suggest that Conscientiousness is the most beneficial trait for trauma workers, as individuals high on this trait focus more on the positive aspects of their work.

These findings support the hypothesis that personality traits may influence symptoms of VT and suggest that high Neuroticism, or low Emotional Stability, is the most useful personality predictor, as it places individuals at a higher risk of experiencing both intrinsic and extrinsic symptoms of VT. High levels of Conscientiousness and Openness to Experience may represent a resilient personality, whilst Agreeableness may present as a vulnerable personality trait.

Contrary to expectations, the groups did not possess significant differences in personality, suggesting that as a professional group, lawyers are more vulnerable to experiencing symptoms of VT for reasons unexamined in this study. These results do not support previous literature evidencing lawyers to have high levels of Neuroticism (Deveson, 2012) and indicate that group differences on VT measures cannot be accounted for by individual personality characteristics.

These findings have many implications for the profession of law, as they suggest that the vulnerability observed in lawyers is attributable to organisational factors rather than individual personality characteristics. It has been suggested that several professional variables play a role in the development of VT that could affect group differences, including a lack of support within the work environment, such as an absence of debriefing or

supervision (Bride, Hatcher, & Humble, 2009; Sprang et al., 2011), along with inadequate formal trauma training (Adams & Riggs, 2008; Finklestein et al., 2015). While speculative, it is suggested that such variables associated with the profession of law and mental health may account for the group differences observed.

VT is considered to be a normal reaction of exposure to others' trauma (Saakvitne & Pearlman, 1996) and therefore cannot be avoided, although scores on VT measures amongst MHPs in the present study indicate that symptoms can be alleviated. The present findings support Bober and Regehr's (2006) suggestion that strategies to reduce the negative symptoms associated with trauma work should be targeted at the institutional level. Interventions can be aimed at better preparing lawyers for the risk of VT and educating students and professionals on signs and symptoms. These strategies can be applied to the law school curriculum or within the professional organisation in order to prepare lawyers for exposure to traumatic material at work. These work characteristics are not measured in this study, and future research is needed to evidence the relationship between organisational factors and VT amongst lawyers.

There are a number of methodological limitations to this study that suggest caution in the interpretation of the findings and generalisability of the results across professions. Firstly, the lack of group differences in personality between professionals could be a result of the limitations associated with the personality measure used. The TIPI is a very brief measure of personality and whilst it has been shown to have adequate reliability in measuring personality traits (John & Donahue, as cited in Benet-Martinez & John, 1998), as well as good convergence with the Big Five Inventory (BFI; John, Donahue, & Kentle, 1991), there are psychometric costs associated with its brevity. Relevant to this study, it is possible that a larger personality measure, such as the 240-item NEO-PI-R

(Costa & McCrae, 1992), would reveal group differences in personality, as reflected in the lawyer personality literature (Deveson, 2012).

Further limitations arise through the subjective nature of the self-report measures utilised to investigate VT. Though such measures are effective in obtaining professionals' perceptions of their experiences (Sabin-Farrell & Turpin, 2003), they rely on participants to acknowledge the existence of symptoms and can create bias in how individuals apply meaning to such experiences. Secondly, the cross-sectional nature of the design denies the possibility of assessing changes in cognitive schemas. Future research is needed into how cognitive schemas change over time – or prior to trauma work – as a result of VT, especially amongst law populations, given the susceptibility to VT that is observed in this study.

Future research should focus on assessing the speculated protective factors of the mental health field and implementing these supports to other professions exposed to distressing information. This work could then form a basis for identifying the most effective interventions for reducing VT among legal professionals, which could be incorporated at both training and professional levels to protect individuals from the negative consequences of trauma work.

In conclusion, this research adds to the current body of literature pertaining to the nature of VT amongst professionals and provides evidence that personality traits play a role in influencing an individual's resilience or vulnerability to VT. What emerges from this study is that law professionals and MHPs are both affected by exposure to trauma. However, professionals in the mental health field may be better at managing the impact of this exposure. From this study, it is speculated that intervention strategies to reduce VT may be more effective if they are targeted at the organisational level, rather than on the basis of an individual's underlying personality dispositions. Future research should be

conducted to support these claims and recommendations with respect to the need for resources such as debriefing, supervision and education to be concentrated on supporting lawyers.

Disclosure Statement

No potential conflict of interest was reported by the authors.

References

- Adams, S. A., & Riggs, S. A. (2008). An exploratory study of vicarious trauma among therapist trainees. *Training and Education in Professional Psychology*, 2, 26–34. doi:10.1037/1931-3918.2.1.26
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Aparicio, E., Michalopoulos, L. M., & Unick, G. J. (2013). An examination of the psychometric properties of the vicarious trauma scale in a sample of licensed social workers. *Health & Social Work*, 38(4), 199–206. doi:10.1093/hsw/hlt017
- Australian Association of Social Workers. (2013). *Practice standards AASW*. Canberra: Author. Retrieved from <https://www.aasw.asn.au/document/item/4551>
- Benet-Martinez, V., & John, O. P. (1998). Los Cinco Grandes across cultures and ethnic groups: Multitrait method analyses of the Big Five in Spanish and English. *Journal of Personality and Social Psychology*, 75, 729–750.
- Bober, T., & Regehr, C. (2006). Strategies for reducing secondary or vicarious trauma: Do they work? *Brief Treatment and Crisis Intervention*, 6(1), 1–9. doi:10.1093/brief-treatment/mhj001
- Breslau, N., & Schultz, L. (2013). Neuroticism and post-traumatic stress disorder: A prospective investigation. *Psychological Medicine*, 43(8), 1697–1696. doi:10.1017/S0033291712002632
- Bride, B. E., Hatcher, S. S., & Humble, M. N. (2009). Trauma training, trauma practices, and secondary traumatic stress among substance abuse counselors. *Traumatology*, 15(2), 96–105. doi:10.1177/1534765609336362
- Byrne, M. K., Lerias, D., & Sullivan, N. (2006). Predicting vicarious traumatisation in those indirectly exposed to bushfires. *Stress and Health*, 22(3), 167–177.

- Cohen, K., & Collens, P. (2013). The impact of trauma work on trauma workers: A metasynthesis on vicarious trauma and vicarious post-traumatic growth. *Psychological Trauma: Theory, Research, Practice, and Policy*, 5(6), 570–580. doi:10.1037/a003038
- Costa, P. T. Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI): Professional Manual*. Odessa, FL: Psychological Assessment Resources.
- Deveson, M. (2012). The 'lawyer personality' and the five factor model: Implications from personality neuroscience. *Neuroscience*, 1. Retrieved from <http://www.civiljustice.info/cgi/viewcontent.cgi?article=1000&context=neuro>
- Devilly, G. J., Wright, R., & Varker, T. (2009). Vicarious trauma, secondary traumatic stress or simply burnout? Effect of trauma therapy on mental health professionals. *Australasian Psychiatry*, 43(4), 373–385. doi:10.1080/00048670902721079
- Dunkley, J., & Whelan, T. A. (2006). Vicarious traumatization: Current status and future directions. *British Journal of Guidance & Counselling*, 34(1), 107–116. doi:10.1080/03069880500483166
- Finklestein, M., Stein, E., Greene, T., Bronstein, I., & Solomon, A. (2015). Posttraumatic stress disorder and vicarious trauma in mental health professionals. *Health & Social Work*, 40(2), 26–31. doi:10.1093/hsw/hlv026
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, 37, 504–528. doi:10.1016/S0092-6566(03)00046-1
- Horowitz, M. J. (2006). Work-related trauma effects in child protection social workers. *Journal of Social Service Research*, 32(3), 1–8. doi:10.1300/J079v32n03_01
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). The Big-Five Inventory – versions 4a and 54 (Technical Report). Berkeley, CA: University of California, Berkeley, Institute of Personality and Social Research.
- Kang, T. H., Seligman, M. E., & Verkuil, P. R. (2005). Why are lawyers unhappy? *Deakin Law Review*, 10(1), 49–66.
- Lerias, D., & Byrne, M. K. (2003). Vicarious traumatization: Symptoms and predictors. *Stress and Health*, 19(3), 129–138. doi:10.1002/smi.969
- Lovibond, S. H., & Lovibond, P. F. (1995). *Manual for the depression anxiety stress scales* (2nd ed.). New York: Oxford University Press.
- Măirean, C., & Turliuc, M. N. (2013). Predictors of vicarious trauma beliefs among medical staff. *Journal of Loss and Trauma*, 18(5), 414–428. doi:10.1080/15325024.2012.714200
- Maltby, J., Day, L., & Macaskill, A. (2010). *Personality, individual differences, and intelligence*. London: Pearson Education.
- McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress*, 3(1), 131–149. doi:10.1007/BF00975140
- Moulden, H. M., & Firestone, P. (2007). Vicarious traumatization: The impact on therapists who work with sexual offenders. *Trauma Violence Abuse*, 8(1), 67–83. doi:10.1177/1524838006297729
- Murray, D. C., & Royer, J. M. (2004). *Vicarious traumatization: The corrosive consequence of law practice for criminal and family justice practitioners*. Paper presented at the Legal Profession Assistance Conference, Dalhousie University, Halifax, Nova Scotia, Canada. Retrieved from http://www.lpac.ca/main/main/vicarious_trauma.aspx
- Neumann, D. A., & Gamble, S. J. (1995). Issues in the professional development of psychotherapists: Countertransference and vicarious traumatization in the new trauma therapist. *Psychotherapy: Theory, Research, Practice, Training*, 32(2), 341–347. doi:10.1037/0033-3204.32.2.341
- O'Halloran, M. S., & O'Halloran, T. (2001). Secondary traumatic stress in the classroom: Ameliorating stress in graduate students. *Teaching of Psychology*, 28, 92–97. doi:10.1207/S15328023TOP2802_03
- Parker, C. (2014). The 'moral panic' over psychological wellbeing in the legal profession: A personal or political ethical response? *University of New South Wales Law Journal*, 37(3), 1103–1141.
- Pearlman, L. A., & Mac Ian, P. S. (1995). Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. *Professional Psychology: Research and Practice*, 26(6), 558–565. doi:10.1037/0735-7028.26.6.558
- Pearlman, L. A., & Saakvitne, K. W. (1995). Treating therapists with vicarious traumatization and secondary traumatic stress disorders. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 150–177). New York: Brunner/Mazel.

- Psychology Board of Australia. (2013). *Registration: Supervision*. Retrieved from <http://www.psychologyboard.gov.au/Registration/Supervision.aspx>
- Regehr, C., Hemsworth, D., Leslie, B., Howe, P., & Chau, S. (2004). Predictors of post-traumatic distress in child welfare workers: A linear structural equation model. *Children and Youth Services Review*, 26(4), 331–346. doi:10.1016/j.childyouth.2004.02.003
- Rothschild, B. (2006). *Help for the helper: The psychophysiology of compassion fatigue and vicarious trauma*. New York: W. W. Norton.
- Saakvitne, K. W., & Pearlman, L. A. (1996). *Transforming the pain: A workbook on vicarious traumatization*. New York: W. W. Norton.
- Sabin-Farrell, R., & Turpin, G. (2003). Vicarious traumatization: Implications for the mental health of health workers? *Clinical Psychology Review*, 23(3), 449–480. doi:10.1016/S0272-7358(03)00030-8
- Schauben, L. J., & Frazier, P. A. (1995). Vicarious trauma: The effects on female counselors of working with sexual violence survivors. *Psychology of Women Quarterly*, 19(1), 49–64. doi:10.1111/j.1471-6402.1995.tb00278.x
- Sinclair, S. J., Siefert, C. J., Slavin-Mulford, S. M., Stein, M. B., Renna, M., & Blais, M. A. (2012). Psychometric evaluation and normative data for the depression, anxiety, and stress scales-21 (DASS-21) in a nonclinical sample of U.S. adults. *Evaluation & The Health Professions*, 35(3), 259–279. doi:10.1177/0163278711424282
- Soler-Ferrería, F. B., Sánchez-Meca, J., López-Navarro, J. M., & Navarro-Mateu, F. (2014). Neuroticism and post-traumatic stress disorder: A meta-analytic study. *Revista española de salud pública*, 88(1), 17. Retrieved from <http://eds.a.ebscohost.com/eds/detail>
- Sprang, G., Craig, C., & Clark, J. (2011). Secondary traumatic stress and burnout in child welfare workers: A comparative analysis of occupational distress across professional groups. *Child Welfare*, 90(6), 149–168.
- Steed, L., & Bicknell, J. (2001). Trauma and the therapist: The experience of therapists working with the perpetrators of sexual abuse. *Australasian Journal of Disaster and Trauma Studies*, 1. Retrieved from <http://www.massey.ac.nz/%7Etrauma/issues/2001-1/steed.htm>
- van den Hout, M. A., & Engelhard, I. M. (2004). Pretrauma neuroticism, negative appraisals of intrusions, and severity of PTSD symptoms. *Journal of Psychopathology and Behavioral Assessment*, 26(3), 181–183. doi:10.1023/B:JOBA.0000022110.17639.60
- Vrklevski, L. P., & Franklin, J. (2008). Vicarious trauma: The impact on solicitors of exposure to traumatic material. *Traumatology*, 14(1), 106–118. doi:10.1177/1534765607309961
- Way, I., VanDeusen, K. M., Martín, G., Applegate, B., & Jandle, D. (2004). Vicarious trauma: A comparison of clinicians who treat survivors of sexual abuse and sexual offenders. *Journal of Interpersonal Violence*, 19(1), 49–71. doi:10.1177/0886260503259050
- Weiss, D., & Marmar, C. (1997). The impact of events scale-revised. In J. Wilson & T. Keane (Eds.), *Assessing psychological trauma and PTSD* (pp. 399–411). New York: Guilford.